EDUCATIONAL AUDIOLOGY
AMPLIFICATION ISSUES

Amplification issues are one of the most important and time-consuming aspects of the educational audiologist=s job. In schools, this generally includes hearing aid technology, FM assistive listening devices and sound field amplification.

Educational audiologists should have a good working knowledge of current FM assistive listening device technology. This includes current manufacturers, fitting options, settings, fitting verification, coupling options, cost, maintenance and troubleshooting. The audiologist is responsible for assessing the need for amplification, determining appropriate settings and verifying the usefulness of amplification in the classroom. Sound field testing and the use of electroacoustic and real ear testing may be beneficial, if available. Assessing the classroom environment may also be necessary. FM amplification has more recently been provided to students with central auditory processing and attentional problems. Fitting of FM systems in this case requires monitoring of normal hearing by periodic screening and the successful trial period of use documenting the benefit of the system. Maintenance contracts are essential to maintaining FM equipment. Individual manufacturers can give information on price and services. Inclusive service contracts generally include all accessories and summer service.

Sound field amplification systems are often used in classrooms where children have cochlear implants, personal hearing aids, auditory processing and/or attentional problems. These systems are fairly inexpensive and easy to install. One of their greatest assets is that they benefit all students in the classroom. Specifications for including sound field systems in at least one classroom per grade level should be included in any new school building.

The educational audiologist should be familiar with all current technology (cochlear implants, digital and programmable hearing aids). The audiologist in the school setting will most likely see some or all of these technologies and will be expected to be knowledgeable about them, even if they are not provided by the school system. IDEA requires school systems to provide amplification to meet the student's needs by giving them reasonable benefit. Typically, school systems provide FM assistive technology for students to use at school rather than personal hearing aids.

Preparing or assisting in the preparation of the budget for amplification may also be the audiologist=s responsibility. A budget will generally include earmolds, new equipment, maintenance contracts and repairs. Each school system will have its own procedure for getting quotes from various manufacturers and providers and acquiring new equipment. Often, purchase orders are required in advance for new equipment, repairs, maintenance contracts and earmolds. A blanket purchase order may be obtained at the beginning of the school year for an estimated number of new earmolds. The type of FM system, hearing loss and coupling requirements will determine which type of earmolds is necessary. Typically, these have to be replaced annually.

When considering new amplification equipment, price, reliability, customer service and repair time should be considered.

Federal regulations require that amplification worn by children with hearing loss be monitored. This may be completed by the student=s teacher, the speech-language pathologist or other personnel at the school level. The student may participate in the battery check but could not do a listening check. The purchase of listening stethosets, battery testers, batteries, disinfectant cleaners and other amplification care accessories may be necessary. Students should be encouraged to take the primary responsibility for ensuring that their equipment is working properly at school.

Proper inventory of all equipment is essential. An appropriate check in/out procedure should be implemented so that the audiologist is aware of the location of all school equipment. The audiologist should provide for the return of the equipment at the end of the school year and store it properly or provide for summer service.

Recommendations for including amplification in Individualized Education Programs (IEP) may be necessary. The school audiologist should be familiar with current forms and procedures related to the IEP.

Inservice of teachers, other school personnel and students is an ongoing process. Training should include the use, care and basis troubleshooting techniques for FM systems and hearing aids. Advocacy for the use of amplification in the school system is an important part of the audiologist=s job, as well.